

IN THE CLAIMS

Please amend the claims as follows:

1. (CURRENTLY AMENDED) A vehicle occupant sensing system for detecting a condition of a vehicle seat, said system comprising:

a circuit carrier and an electric circuit supported by said circuit carrier, said electric circuit presenting a plurality of leads;

at least one low profile sensor assembly having a housing that includes a fixed base, an upper slide member, and at least one intermediate guide member disposed between said upper slide member and said base, said upper slide member and said at least one intermediate guide member supported for movement toward and away from said fixed base in response to movement of said vehicle seat;

at least one sensor operatively supported by said circuit carrier and fixed relative to said upper slide member and said base and operable to detect movement of said upper slide member toward and away from said base, said at least one sensor including a plurality of terminals corresponding to said plurality of leads presented by said electric circuit; and

a plurality of conductive connectors associated with said corresponding plurality of terminals and leads, said conductive connectors each including a body disposed for electrical communication with the associated terminal and including at least one deformable blade extending into said circuit carrier and into electrical communication with the associated lead of said electric circuit, thereby mechanically attaching said conductive connector to said circuit carrier while providing electrical communication between said at least one sensor and said electric circuit.

2. (ORIGINAL) A vehicle occupant sensing system as set forth in claim 1, wherein said at least one deformable blade comprises a first portion, a second portion and a third portion, and wherein said first portion extends into and through said circuit carrier and into electrical communication with the associated lead of said electric circuit, and said second portion is bent such that said third portion extends into said circuit carrier and into electrical communication with the associated lead of said electric circuit.

3. (ORIGINAL) A vehicle occupant sensing system as set forth in claim 1, wherein said body of said conductive connector comprises at least one arm adapted to contact the associated terminal to thereby establish mechanical and electrical communication with the associated terminal.

4. (CURRENTLY AMENDED) A vehicle seat comprising:
a lower seat cushion including an upper surface and a lower surface spaced from said upper surface;

a circuit carrier disposed adjacent said lower surface of said lower seat cushion;

an electric circuit supported by said circuit carrier, said electric circuit presenting a plurality of leads;

at least one low profile sensor assembly having a housing that includes a fixed base, an upper slide member, and at least one intermediate guide member disposed between said upper slide member and said base, said upper slide member and said at least one intermediate guide member supported for movement toward and away from said fixed base in response to said lower surface of said seat cushion;

at least one sensor operatively supported by said circuit carrier adjacent said at least one low

profile sensor assembly, said at least one sensor fixed relative to said upper slide member and said base and adapted to detect a condition of the vehicle seat based on the response of said at least one low profile sensor assembly, said at least one sensor including a plurality of terminals corresponding to said plurality of leads presented by said electric circuit; and

a plurality of conductive connectors associated with said corresponding plurality of terminals and leads, said conductive connectors each including a body disposed for electrical communication with the associated terminal and including at least one deformable blade extending into said circuit carrier and into electrical communication with the associated lead of said electric circuit, thereby mechanically attaching said conductive connector to said circuit carrier while providing electrical communication between said at least one sensor and said electric circuit.

5. (ORIGINAL) A vehicle seat as set forth in claim 4, wherein said at least one deformable blade comprises a first portion, a second portion and a third portion, and wherein said first portion extends into and through said circuit carrier and into electrical communication with the associated lead of said electric circuit, and said second portion is bent such that said third portion extends into said circuit carrier and into electrical communication with the associated lead of said electric circuit.

6. (ORIGINAL) A vehicle seat as set forth in claim 4, wherein said body of said conductive connector comprises at least one arm adapted to contact the associated terminal to thereby establish mechanical and electrical communication with the associated terminal.

7. (CURRENTLY AMENDED) A method of manufacturing a vehicle occupant sensing system for detecting a condition of a vehicle seat, the vehicle occupant sensing system comprising:

a circuit carrier and an electric circuit supported by said circuit carrier, said electric circuit presenting a plurality of leads;

at least one low profile sensor assembly having a housing that includes a fixed base, an upper slide member, and at least one intermediate guide member disposed between said upper slide member and said base, said upper slide member and said at least one intermediate guide member supported for movement toward and away from said fixed base in response to movement of said vehicle seat;

at least one sensor operatively supported by said circuit carrier and fixed relative to said upper slide member and said base and operable to detect movement of said upper slide member toward and away from said base, said at least one sensor including a plurality of terminals corresponding to said plurality of leads presented by said electric circuit; and

a plurality of conductive connectors associated with said corresponding plurality of terminals and leads, said conductive connectors each including a body disposed for electrical communication with the associated terminal and including at least one deformable blade; wherein said method of manufacturing comprises the step:

- a) extending said at least one deformable blade into said circuit carrier and into electrical communication with the associated lead of said electric circuit, thereby mechanically attaching said conductive connector to said circuit carrier.

8. (ORIGINAL) A method of manufacturing a vehicle occupant sensing system as set forth in claim 7, wherein step (a) comprises the steps:

- 1) extending a first portion of said at least one blade into and through said circuit carrier and into electrical communication with the associated lead of said electric circuit;
- 2) bending a second portion of said at least one blade; and
- 3) extending a third portion of said at least one blade into said circuit carrier and into electrical communication with the associated lead of said electric circuit.